

**HOUSING ALLOWANCES IN KAZAKHSTAN:
PROGRAM DESIGN AND
IMPLEMENTATION STRATEGIES**

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EXECUTIVE SUMMARY

This report was prepared in response to a request from the Ministry of Construction, Housing and Territorial Development of the Republic of Kazakhstan to assist the government to prepare a preliminary plan for implementing a national program of housing allowances. Like other Newly Independent States of the Former Soviet Union, Kazakhstan must manage the difficult transition from a command economy to a market economy in a short period of time. In order to sustain the transition program, the government is committed to a course of widespread housing privatization, gradual decentralization of construction and management of the housing stock, and steady reduction of subsidies to the housing sector.¹

Currently, in Kazakhstan, it is estimated that between 60 and 85 percent of the housing stock (apartments and single family homes) already is privatized. However, local governments remain responsible for providing housing management, maintenance and utility services to the large majority of the housing stock, including the privatized portion. The fees collected from residents for these services amount to only 2.5 tenge per square meter or approximately 20 percent of the actual cost of 11 tenge per square meter. Estimates for the municipality of Kapchagai², for instance, indicate that monthly subsidies for housing amount to more than 6 million tenge per month, or an average of 430 tenge per month for every housing unit. Despite these enormous subsidies, many low-income households cannot afford their current housing costs, and will be unable to afford higher fees without some governmental assistance. By presidential decree, therefore, the government is proposing to implement a national program of targeted housing allowances as a means to protect the welfare and housing opportunities of low-income families, while at the same time allowing local governments to raise property management, maintenance, and utility fees to cover the full cost of providing these services.

The Ministry of Construction, Housing and Territorial Development is responsible for the new housing allowances program. Starting in late 1994 or early 1995, the Ministry intends to implement two versions of a housing allowance program in the municipalities of Talgar³ and Kapchagai. Talgar and Kapchagai are considered a good "testing ground" for two distinct approaches to implementing a housing allowance scheme because they are approximately the same size and are close to Almaty, but their housing stocks differ. Almost two-thirds of the housing units in Talgar are single family homes, while virtually all the area of Kapchagai being considered for the program consists of multi-family units.

¹See Ministry of Construction, Housing and Territorial Development "The New State Housing Policy and Mechanism for its Implementation", approved by the President of the Republic of Kazakhstan on September 6, 1993.

² A city of approximately 42,000 residents (14,000 households) located about 70 kilometers north of Almaty in Almaty Oblast.

³ A city of approximately 38,000 residents (12,000 households) located about 30 kilometers northwest of Almaty in Almaty Oblast.

Housing Allowances and What They are Designed to Achieve

A housing allowance is a subsidy given to a low-income family to make up the difference between the real market cost of housing, and what the family can afford to pay from its own income. Allowance programs are designed to give assistance to families who need it most, while gradually decreasing subsidies to the financially secure. The subsidy "moves" with the occupant -- that is, if a family moves, it may continue to receive an allowance so long as other program requirements are met. Thus, housing allowances also encourage the shift to a market-based housing sector. Additional revenues from the higher fees under a housing allowances program help achieve an overall reduction in government financed housing costs and self-sufficiency of the housing sector. Fees from better off residents can finance the cost of allowances for families in need.

The two basic approaches being considered are an income model and an excess space model. The first approach gives a housing allowance only to those who are below a specified income level, and bases the amount on the portion of income a family is able to contribute towards housing. The second approach distributes the allowance in the form of reduced fees to everyone for a certain standard amount of space, while premiums are charged on a square meter basis on space consumed above this amount. Both approaches involve numerous policy choices. These include decisions about: the amount of space that is considered "standard" for various household sizes, the portion of family income to be spent on housing, the charge for standard space, the charge for excess space, and methods to be used for computing various charges. These program parameters can be varied singly or simultaneously making it difficult and cumbersome to evaluate alternative versions of the program.

The purpose of this study was to provide program design and implementation assistance for the two housing allowance experiments, with an eye towards shaping a national program based on their outcome. As a result of this work, Ministry officials as well as local officials in Kapchagai and Talgar⁴ have been provided with the capacity to design and develop an appropriately structured housing allowance program. ICMA has developed a computer model that allows policy makers to "try out all the options." Because the model incorporates actual survey data from households in Kapchagai and Talgar, it enables officials to test the validity of their assumptions on "real world data," rather than in the isolated world of a theoretical discussion. In addition, the model quickly produces tables and charts with either Russian or English text. Numerous "what-if" scenarios were run on the model and shared with Ministry and local officials.

Feasibility of a Housing Allowance Program

⁴ ICMA commissioned households surveys in Kapchagai and Talgar (completed June, 1994) to measure a variety of factors including the amount of space people currently occupy, housing costs, and attitudes towards building conditions and maintenance. Kapchagai is represented by data from more than 350 households and Talgar is represented by information from more than 550 households.

Before discussing the program design, larger issues concerning the role of housing allowances in economic reform as well as the political challenges of raising housing fees and redistributing housing subsidies need to be addressed. Among the major issues that merit consideration in establishing a housing allowance program:

- The successful implementation of a housing allowance program is directly linked to the national governments commitment to privatization and to the country's prospects for real economic growth. Model results show that, realistically, a housing allowance scheme can reduce the housing subsidy drain on the federal treasury only so much -- perhaps 10% to 30% depending upon which program parameters are chosen. Thus, the real solution to revenue shortages and housing problems lies in general income growth and economic restructuring. The effects of a housing allowance program will be secondary to those of real income growth (or decline). The goal of net subsidy reduction only makes sense in the context of rising GDP, increasing productivity, and short-term control over inflation. An allowance program per se provides only a short-term mechanism for balancing the distribution of costs and benefits more equitably and efficiently.
- A fundamental decision facing policymakers is finding the "right" balance between eliminating government subsidies quickly and providing as much help as necessary to those in need. Two key factors will determine how quickly the government can move to the full cost of 11 tenge per square meter per month (or beyond it to cover capital expenditures). The first factor is the political acceptability of the rate of fee increases. Political acceptability can be enhanced by tying fee hikes to immediate and visible improvements in the maintenance and operations.
- The second factor accounting for how quickly rates can adjust to full cost is the absolute limits on households' ability to pay these costs. Such limits are undoubtedly linked to the general health of the economy and the tangible benefits brought about by the economic restructuring of various sectors of the economy. However, it is not clear when these benefits will reach the pocketbooks and wallets of the average citizen. Given that households are now typically spending more than half of their reported income on food, they will be unwilling or unable to pay higher housing costs without sacrificing other necessities. Therefore, both fee increases and housing allowances must be phased in over time (for example, over 2 years) to allow families to either adjust their budgets to higher costs -- already high because of inflation -- or to move to other units.
- The choice between an income-based approach or a space-based approach will be dictated by the ability of local officials to verify income. More than merely an administrative consideration, the certification of household income is a subject of intense debate among Ministry of Housing officials as well as local government

representatives. Based on these conversations as well as ICMA survey results, it is clear than the practical difficulties of verifying income cannot be underestimated. Some observers have suggested that almost half of the national economy is "underground." If obtaining accurate household income is not possible, then a compelling argument exists for implementing a version of the excess space model, which does not require calculating eligibility on an individual household basis. On the other hand, basic considerations of social justice as well as program economics suggest that those who can afford to pay their share should not receive a subsidy from financially strapped local governments. Political opposition could well arise if limited resources are seen as subsidizing the relatively well off.

- Paradoxically, the new income tax system is both a threat and opportunity for implementing an income-based allowance program. To the extent it will provide more incentive for people to hide their income, it poses a formidable obstacle for the allowance program. On the other side of the coin, to the extent a rigorous system for detecting cheaters is developed, it will overcome current objections to using an income-based approach. Policymakers might consider using a version of the excess space model, perhaps with self-certification of income, as a "stepping stone" to a more sophisticated system of income verification, once the new system is in place.

- Privatization of maintenance is a key element in any formula for rapid and visible improvement in the quantity, quality, and reliability of maintenance and utility services. It is unfortunate that the national government has not chosen to implement a maintenance of privatization experiment in tandem with the housing allowance program.⁵ Local officials should be given this option. In any case, whether privatized or performed by city government entities, improvements in maintenance and operations will go a long way in overcoming political resistance to fee increases. One politically persuasive means of "selling" the housing allowance program is for local housing officials to state unequivocally that "X" amount of increases in fees will be associated with "Y" amount of new or improved services -- and then make good on the promise.

- Another element in the program financing equation is the ability of housing maintenance organizations to squeeze savings and efficiencies out of the current system. Today's subsidies consist not only of cash costs, but of non-performance of certain basic services, lack of routine maintenance, and accelerated depreciation on the properties -- almost all of which is borne by residents. This study did not set out to address the issue of maintenance cost reduction, but this point should not be overlooked as a way to, at least partially, eliminate subsidies. Actions on the part of maintenance organizations could range from measures as dramatic as the formation of ownership or "condominium" councils and the letting of private service contracts to

⁵ A housing maintenance demonstration project currently is underway in the capital city of Almaty.

more simple and direct steps such as organizing bulk purchasing arrangements for supplies or installing utility meters where technologically possible.

Elements of Housing Allowance Program Design

Though, as noted above, this study focused primarily on two approaches to housing allowances -- income-based and space-based -- several variations on these approaches were tested using the ICMA model. The model runs are intended to serve as illustrations of the effects of possible program choices and to demonstrate to Ministry of Housing officials the programmatic and financial impacts of some of the scenarios they have suggested. Versions of the program tested included:

(1-A) Income Model - with percentage of income contributed by families towards housing;

(1-B) Income model - with a minimum wage formula to determine how much income families have left over for housing after basic expenses;

(2) Excess space model - charging families different rates for the normal space and excess space they consume;

(3) Space with income cap model - incorporating into the excess space model a percentage of income maximum that families pay for their normal space, while charging a higher rate for excess space.

Drawing on the experience of housing allowance programs in other transitional economies and on the scenarios tested on ICMA's housing allowance model for these versions of the program, several design and implementations issues will be important to the Republic of Kazakhstan as it develops a national system of housing allowances. Among the "lessons learned:"

- No single housing allowance formula works best for every locality; rather, program parameters should be adapted to local circumstances. Local priorities should take into account characteristics of the housing stock (ownership, size, physical condition, etc); local costs of building management, maintenance and utilities; demographic and income characteristics of the target population; and the composition and size of current housing subsidies that need to be reduced. ICMA's housing allowance model can help narrow the range of suitable program options.

- There is an administrative corollary to the point just made. One of the strengths of a housing allowance program is that it can be "tailored" to reflect local economic, demographic, and housing stock conditions. Therefore, local officials should be given considerable discretion to set program parameters most suitable for their local housing market. In addition, local officials must be provided -- from the very start -- with the

resources, training, and support needed to develop the organizational capacity to administer the program locally. Besides devolving program decision-making to the local level, Ministry officials may want to rethink role of the oblast. Absent a clear function for the regional level in organizing or delivering housing services or subsidies, elimination of this tier of bureaucracy in the housing sector may be warranted.

- Neither income formula -- percentage of income or minimum wage -- is correct nor incorrect; rather the choice between is dictated by the priorities of the government: to reduce subsidies more quickly or more slowly versus providing greater or lesser amounts of housing assistance to individual families. In general, it appears that although eligibility rates are higher under the percentage of income formula, allowances decrease with household income, and the overall subsidy cost for the program is lower. With the minimum wage formula, the combined effects of family size and income suggest the allowance is doing a better job of targeting overcrowded households, but the allowances awarded can be quite high relative to total family income.

- Space norms can greatly affect the overall cost of the program. With the percentage of income formula, raising the space norms increases the number of households eligible to receive a housing allowance and raises the cost of the program. With the minimum wage formula, changing space norms does not so much alter eligibility rates, as it does increase the amount of allowances to be received by each household, and therefore, increases the overall cost of the program considerably. Ironically, changing space norms does not have a dramatic impact on revenues and expenditures in the excess space model. The reasons for this appear to be twofold: first, though between 50% and 80% of households have excess space (depending upon how excess is defined), the amount of excess in many cases is fairly trivial; second, the complex set of coefficients suggested by the Ministry for computing excess space charges does not result in much in the way of additional revenues because of the way in which that excess space is distributed. If local officials choose to implement an excess space model, they should consider levying the charge for excess space as a flat rate that is considerably higher than the charge for norm space, and much closer to the real cost of that space.

- Most of the scenarios run --whether using the income approach or the space approach -- demonstrated that a housing allowance program is workable provided some of the broader policy issues outlined above are resolved. Even if fees charged to residents are raised relatively little, and the subsidy from the government remains relatively large, this outcome represents a considerable improvement over the current system of subsidies. The benefits of a housing allowance scheme can be gained almost immediately by implementing a carefully designed program.

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1. Introduction

This report is prepared in response to a request from the Ministry of Construction, Housing and Territorial Development of the Republic of Kazakhstan to assist the government to prepare a preliminary plan for implementing a national program of housing allowances. Like other NIS countries, Kazakhstan must manage the difficult transition from a command economy to a market economy in a short period of time. In order to sustain the transition program, the government is committed to a course of widespread housing privatization, gradual decentralization of construction and management of the housing stock, and steady reduction of subsidies to the housing sector.⁶

Currently, in Kazakhstan, it is estimated that between 60 and 85 percent of the housing stock (apartments and single family homes) already is privatized. However, local governments remain responsible for providing housing management, maintenance and utility services to the large majority of the housing stock, including the privatized portion.⁷ The fees collected from residents for these services do not come close to covering actual costs. At the same time, many low-income households cannot afford their current housing costs. By presidential decree, therefore, the government is proposing to implement a national program of targeted housing allowances as a means to protect the welfare and housing rights of low-income families, while at the same time allowing local governments to raise property management, maintenance and utility fees to cover the full cost of providing these services.

This report provides information for Republic and local officials charged with developing the new housing allowance program according to the President's decree. The Ministry intends to implement two versions of a housing allowance program in the local municipalities of Kapchagai and Talgar. To assist with the design of the allowance experiments, this report highlights areas that require discussion and deliberation within the Ministry as well as in the meetings with local officials that are scheduled to take place over the next several months. Much of the information included here is presented as charts or in tabular form so that it may be easily translated for handouts or converted for use on an overhead projector in these important discussions.

These materials are based on (a) recently completed household surveys in Kapchagai and Talgar (used to measure the amount of space people currently occupy and to derive preliminary estimates of local program costs and impacts); (b) national and local data about the characteristics of the housing inventory, and about current operating expenses; and (c) meetings with local officials in Kapchagai and Talgar and with Republic officials at the Ministry responsible for the new allowance program.

ICMA has analyzed data from the surveys using a computer model specifically designed to test different scenarios under a housing allowance program on actual households in Kazakhstan. This report presents primarily Kapchagai data, as the analysis of data from Talgar is expected to be completed shortly by policymakers in Kazakhstan using the model. **All of the charts and tables that have resulted from the**

⁶See Ministry of Construction, Housing and Territorial Development "The New State Housing Policy and Mechanism for its Implementation", approved by the President of the Republic of Kazakhstan on September 6, 1993.

⁷Approximately 12 percent of the housing stock was formerly owned and managed by departmental enterprises (e.g. transportation departments, electric utilities, factories) independently of the central government. Even though large numbers of these units have been privatized, the enterprises themselves remain responsible for building management, maintenance and utilities. In certain cases enterprises no longer have the resources to devote to maintaining these units. As a result, the condition of these units has grown substantially worse.

analysis thus far are presented in this report to illustrate the effects of some of the program parameters that may be selected by policymakers. Any number of variations of the program can be proposed, and policymakers are urged to consider other parameters that may be appropriate and to test them out on the computer model. The model resides at ICMA and can quickly produce charts and tables with Russian text. It provides a tool by which republic and local officials can check the validity of their assumptions, and try out proposed program requirements on "real world" data, rather than in the isolated world of a theoretical discussion. Additional information about this model can be found in the Appendix to this report.

A caution about interpreting the results of this model is in order. The model cannot and is not designed to produce a single "optimal" solution. Housing allowances are being undertaken in the context of a larger effort to transition -- not only the housing sector -- but all economic activity from a centralized command economy to a market system. Not surprisingly, while many Kazakhstanis have prospered, still others find themselves in the throes of considerable economic dislocation and hardship. Real incomes have declined and many households have seen tangible worsening of their standard of living. Housing allowances alone do not surmount these problems. Indeed, housing allowances are designed to redistribute housing subsidies to those who are less well off. By definition, this redistribution requires that families who can afford to do so pay for themselves, and those who can't pay full board, contribute their share. For the system to work, some families -- indeed most -- will have to experience real income growth and begin to reap the benefits of economic restructuring.

2.0 The Current Situation

Fees Are a Fraction of Real Cost⁸

In the context of Kazakhstan's transition to a market economy, it is clear that current residential rents and fees for housing management, maintenance and utilities are not sufficient to cover true costs. At the level of the central government, heating fuel subsidies alone consume about 2.8 percent of the total budget (3.6 billion tenge out of 127.5 billion tenge total expenditures). In addition, total expenses for realizing new housing policies and programs are expected to add an additional 2.1 billion tenge, bringing total housing subsidies to more than 5.7 billion tenge. This amounts to more than one quarter of the 1994 projected budget deficit.

At the local level, individual families are paying far less than the true cost of maintenance and utilities. Not including capital replacements and repairs (many of which have been deferred over the past 20 years), current monthly costs for maintenance and utilities are estimated to be approximately 11 tenge per month square meter. According to the survey of Kapchagai residents carried out for this study, residents of Kapchagai pay about 2.29 tenge per square meter per month for the maintenance and utilities of their units. This figure was corroborated by examination of the budget of the Kapchagai Department of Housing Management, which indicates the household's share of costs to be on average about 2.58 tenge. A compromise between the two figures, or 2.45 tenge per square meter has been used in this analysis. On the typical 45 to 50 square meter apartment for a family of three, the fee for maintenance and utilities cost about 110 tenge per month or about 10 percent of the reported 1,100 tenge monthly average household income for the typical family of three people.

On the government side of the equation, current estimates by the federal government and local municipalities for communal housing expenses vary widely depending on the source of information and the

⁸ At this writing, the exchange rate is 45 tenge to the U.S. dollar. All calculations and conversions in the analysis were performed using this rate.

items included in the estimate. For this analysis several sources of information were considered including housing budgets from the municipal governments of Kapchagai and Talgar, current estimates of costs developed by the Ministry of Housing, and a listing of maintenance and utility costs for the Lenina-Khadgi district of Alma Ata. Table 1 presents information that was available for estimating overall costs of maintenance and utilities in Kapchagai. The estimate takes into account the fact that certain charges like heating and hot water are based on per-person charges, while others like maintenance and repairs are based on costs per square meter. In order to undertake the analysis for the housing allowance program, the estimate of total cost is expressed on a per-square-meter basis.

On this basis, the true costs of providing maintenance, operations and utilities -- excluding major capital improvements -- is roughly 11 tenge per square meter per month. As noted above, residents in Kapchagai currently are paying, on average, about 2.45 tenge or only 2 percent of this cost.⁹ Another 2.0 tenge is accounted for by subsidies for heat, hot water, and a shortfall in maintenance fees that is made up by the government. This leaves about 6.55 tenge that is subsidized, but is not strictly accounted for. According to conversations with Oblast officials, it is believed that at least 4.33 tenge per square meter per month (if not more) flows to the city in the form of additional subsidies from the Oblast. Not all of this cost is visible as cash or even bank transfers among various government accounts. A portion of the cost is incurred through non-performance of certain basic services, accelerated depreciation on the properties, and the lack of routine preventative maintenance -- almost all of which is borne by residents. These factors account for the remaining 2.22 tenge cost. The bar chart in Figure 1 illustrates the breakdown of these costs per square meter.

Applying the square meter cost to the more than 705,000 square meters of space maintained by the Housing Management Department in the section of Kapchagai being considered in this study, the total amount of the subsidy is substantial. At 11 tenge per square meter, the total cost for maintenance and operations is more than 7.76 million tenge per month. On the income side of the ledger, the 2.45 tenge paid by residents as fees translates into monthly revenues for the city of 1.7 million. Thus, the monthly subsidy is estimated to be more than 6 million tenge per month, or an average of 430 tenge per month for every housing unit.¹⁰

An Unsustainable Future

Despite substantial subsidies at the national, regional, and local levels, recent surveys indicate that more than two out of three people are very dissatisfied with the condition of their dwelling units and with

⁹ The 2.45 tenge does not include electricity (which is separately metered), radio (which is negligible) or telephone (which varies a great deal in availability and cost).

¹⁰ These subsidy estimates do not take into account two additional sources of cost: (1) nonpayment of maintenance fees by households, and (2) non-payment of utility fees and non-performance of maintenance by enterprises for units they own (or are responsible for). These distortions have not been considered in this paper.

TABLE 1

FIGURE 1

the maintenance and utility services provided by local government. The long-term deferral of maintenance and capital replacements has resulted in widespread deterioration of the housing stock. Indeed, some basic services and repairs are deferred or simply not performed at all. Only one in ten people say they would be willing to pay more for better services. Reviews of local housing budgets indicate that, if all permitted maintenance and utility fees were collected, this amount would still fall short of current expenditures (not including capital replacement). Moreover, increasing arrearage (nonpayment of fees) is likely to make this deficit even greater.

Because fees charged for maintenance and utilities do not reflect true costs, the current system results in massive subsidies to some families that are occupying large amounts of space or that have the means to pay the true value of the space they occupy; other families remain overcrowded and underhoused because units suitable for their size are not readily available. If the government is to realize its goal of sharply reducing the flow of subsidies to housing, it is clear that the current situation cannot continue.

Under these difficult conditions, there are only two courses of action available to local governments regarding the existing housing stock: (a) to control expenditures through real reductions and/or increased efficiencies, and to (b) raise fees. Both measures are essential and both carry risks. For a large portion of the population, a substantial increase in maintenance and utility fees to cover full costs would impose a severe economic burden that would result in even greater hardship, and probably widespread refusal to pay the higher costs. Immediate full-scale privatization of management services to increase productivity through managed competition could result in substantial dislocation of the current workforce employed by local governments to manage and provide maintenance services. Increased efficiencies gained by redeploying and making better use of existing resources (eg., installing individual utility meters) could encounter technological or logistical barriers.

Thus, a targeted housing allowance program such as that discussed in this paper may offer a self-financing vehicle for gradually raising maintenance and utility fees, shifting to a system of privatized maintenance, introducing efficiencies in resources and manpower, while at the same time protecting low-income families from cost increases they cannot afford.

Circumstances in Kazakhstan pose unique opportunities for such a program. With between 60 and 85 percent of the housing stock privatized, Kazakhstan would provide fertile testing ground for using what was developed essentially as a rental housing tool for the homeownership market. Privatized maintenance could be used in tandem with allowances and could flourish in a well organized system of homeowner associations, assuming they could be developed and sustained.

Unique challenges are posed as well. Where privatized maintenance services were to profit, revenues to local government housing authorities could suffer and political resistance to the program might surface at the level of implementation. Moreover, dealing with homeowners rather than renters as the recipients of housing allowances presents some complex administrative difficulties. Among them: Should beneficiaries of the program be allowed to rent, to move, or to sell or sublet their units? Should they be allowed to take in new household members to qualify for a housing allowance? Finally, some issues are simply unknowns. How would a national housing allowance program affect the emerging market for private real estate transactions and real estate values?

Goals and Objectives for Targeted Housing Allowances Program

The current status of the housing stock in Kazakhstan with respect to ownership structure, physical conditions, facilities and costs, suggests the following five primary goals for a program of targeted housing allowances in Kazakhstan:

1. To **reduce housing subsidies** by raising the price of maintenance and utilities to full market levels over a reasonable period of time;
2. To **protect low-income families** and the members of other social groups unable to afford increases in the costs of housing;
3. To **stimulate the formation of private housing maintenance companies** to increase competition, control costs and increase productivity in the sector;
4. To **facilitate private housing market transactions** and integrate the stock of public and private units at the local level;
5. To **build the capacity of local governments** and help them assume responsibility for the implementation of housing allowances and other programs in support of federal housing goals.

As discussed in the introduction to this report, the first two of these goals are mandated by the government's current housing policy. In one sense they are at odds in that the first argues for fiscal control and the second argues for a commitment of a certain level of government expenditure to provide a social safety-net. On the other hand, targeting assistance to the truly needy based on ability to pay implies the system of distributing housing subsidies is fair and equitable. The perception that the system is fair can serve to increase the political acceptability of increasing maintenance and utility costs.

The third goal is aimed at assuring that the costs of providing maintenance services are kept under control and, over the long run, reduced by assuring free and open competition, thereby providing an incentive for improving the quantity and quality of services provided. The fourth goal, in effect, recognizes the important role that housing allowances and rent increases play in encouraging families to assume responsibility for and to adjust their housing consumption by finding and moving to the best unit they can afford given the resources they have available. Those families that are overhoused may have to pay more or move. Those that are overcrowded may have sufficient resources with the allowance to find new space. These transactions are made more readily because most people are the owners of their dwellings, and have both the opportunity and the responsibility to choose how they want to utilize their privatized dwellings.

The final goal -- building the capacity of local governments -- is critical because the process of creating healthy local housing markets and stimulating freedom of choice will rely upon local government infrastructure and administrative systems that are responsive to local needs and practices. Housing allowances are essentially a tool of government policy that can only be used at the local level. Building the

capacity of local municipal housing agencies to use that tool effectively will be a central requirement of any housing allowance program.

3.0 How Housing Allowances Work: The Basic Concept

In its most basic form, a housing allowance is a grant given to a low-income family to make up the difference between the standard cost of housing in the private housing market, and what the family can afford to pay from its own income. The subsidy is "targeted" in the sense that (a) it is intended to be used for housing only, and (b) it is not available to everyone, but only to those families in need who meet the program's eligibility criteria. The subsidy "moves" with the occupant -- that is, if a family moves, they may continue to receive the subsidy (so long as other program requirements are met). If a family's situation changes, either through changes in family size or changes in income (or in some models, the choice of a new dwelling unit of a different size), then the amount of the allowance may be recalculated.

The housing allowance program must be adapted to specific local housing markets because the calculation of standard housing costs must reflect local housing market conditions, types of dwellings, and prevailing local incomes. If housing costs and space standards are set too low (or eligibility limits drawn too tight), fewer people will be helped by the program, the program will be less expensive to operate, but the many families not receiving assistance may be forced to pay more than is reasonable. On the other hand, if these norms are set too high or eligibility standards are too lax, more families will be eligible and the program will cost too much, thereby offsetting the intended reductions in previous subsidy levels. Program parameters that vary from one locality to the next include:

- standard costs of maintenance and utilities
- range of distribution of prevailing family incomes
- occupancy characteristics (amount of space occupied given household size)
- physical characteristics and condition of the housing stock

A key criteria for the design of the allowance program is that it be fair and equitable. This means that families in most need of assistance should receive the largest benefits from the program, and that those able to provide for themselves should receive little or no assistance. Formulas for calculating the size of an allowance should be calculated in such a way that, after the payment of housing fees, families will still have sufficient income to purchase food, clothing and other essentials. To some extent, the present system of in-kind subsidies in Kazakhstan makes the comparison of affordability norms difficult. But, the basic point is that the combination of increased fees and housing allowances should not force families to reduce their other expenditures below minimum subsistence levels.

At the other end of the income spectrum, there are definite limits to increasing maintenance fees. Even if a family's income makes it ineligible to receive an allowance, it should not be expected to pay a disproportionate share of its income for housing costs. In most countries, the norms for rent-to-income ratios are established at between 20 and 35 percent of gross income, depending on household and unit characteristics. Typically, the more these limits are exceeded, fewer families are willing to pay their share of housing expenses, and fewer will pay the amount due on time because they perceive the policy as

confiscatory. As a result, the costs of collections and/or evictions is likely to increase for the government, thereby offsetting the gain that might be realized from charging higher fees.

With these considerations in mind, two models were explored for implementation as part of the housing allowance program in Kazakhstan. The first, the "housing gap formula," is widely used throughout Europe and the United States, and more recently in Hungary (Szolnok), Bulgaria (Blagoevgrad) and Poland (Warsaw), as well as in the Czech Republic (Prague) and in various cities in the Russian Federation (Moscow, Novosibirsk, and Ufa). The second, the excess space model, is considered as an alternative to the more traditional approach, and is designed to circumvent the particularly thorny issue of income documentation and verification. Also, a third approach combining the targeting of the first model and the administrative simplicity of the second is introduced to address the obvious equity issues that arise with an allowance formula based solely on space consumption, and not taking income into account.

3.1 The Income Model

Housing Gap Formula

This model is so-called because it uses family income as the determinant of whether or not the family is eligible for an allowance and, if so, for how much. The basic idea is to set a standard, or "norm," amount of space to which a family is entitled based on its size. The family is expected to contribute a portion of its own income towards the fees for this space. If that portion of their income is not sufficient to cover the cost, it receives a housing allowance to make up the difference. Note, that an allowance program permits the family to make a choice; if the family desires to stretch its resources and devote a larger portion of its income to live in a space in excess of the norm, it may do so. However, the calculation of the allowance is based on the norm space only. Thus, though the family may choose to stay or to move and consume even more space, it has a strong financial incentive to move to a space more suited to its size. Exhibits 1 and 2 detail the formulas that are used in calculating a housing allowance under the income approach. Also presented are several examples of how the allowance formula would work for some typical families in Kapchagai.

Choosing the Elements of the Income Model

What, then, should be the per square meter fee that households pay for their housing in the immediate future? What is a fair, appropriate and equitable amount of income that households should be expected to pay for their housing costs? How much space should be allocated as the norm as the basis for calculating the allowance? There is no single answer nor is there a perfect computer program to resolve these questions. They are part political decision and part policy choices. However, the computer model and survey data from Kapchagai were used to test how realistic some of the proposed program parameters are when compared to actual information on family finances.

Charge to Residents Per Square Meter: Ultimately, the goal is for households to pay the full cost of their housing. So far, analysis suggests this cost to be 11 tenge per square meter. However, it is unrealistic to raise fees quickly and immediately to this level. Given the lack of willingness on the part of most of the Kapchagai residents surveyed to pay for more current services, an increase of that magnitude would need to

be coupled with an immediate and visible improvement in the quality of maintenance and utility services provided. Even an increase to 5 tenge per square meter -- which is less than half the actual cost -- represents a doubling of current rates and fees. In all likelihood, a more incremental and gradual increase in fees is the only viable course of action for the first few years of the program.

Portion of Income Contributed by Residents: While international norms for contributions from family income range from 20 to about 35 percent, an immediate and rapid increase of that proportion

EXHIBIT 1

EXHIBIT 2

would be a financial shock to families in Kapchagai who are currently paying, on average, about 10 percent of their income towards housing. Lower income families already are paying proportionately larger amounts of their income and may have difficulty paying much higher rates even if they qualify for an allowance. A gradual increase, in the neighborhood of 12% or 15% of income over the next year, would cushion the blow of a sudden and rapid surge in cost for individual families.

An alternative to the usual percentage of income formula based on the national standard for minimum salaries has been proposed by the Ministry of Housing. Instead of designating a percentage of income as the contribution level by the family, the current minimum wage formula is applied to each family to determine, after basic allocations for food and clothing, how much income is left over for housing and other expenses. The minimum wage is set by several ministries in the national government which determine, first what the minimum wage will be, and second, a suitable factor for multiplying this amount. In July 1994, for instance, the minimum wage was 100 tenge and the multiplying factor was 4. This amount is allocated to each family member such that for a four person family, the applicable minimum wage under this formula is 100 times 4, or 400, multiplied by four family members for a total of 1,600. Note, the basic minimum is for food and clothing only. This amount is then subtracted from total family income to determine what remains for housing fees. Because the average reported income of the Kapchagai sample is 1,100 tenge per month, obviously large portions of total income -- and, indeed in some cases, entire portions -- will be exempt from consideration for housing costs, and the amount of the housing allowance will be quite large.

Nevertheless, there is merit to such an approach. A recent World Bank economic report on Kazakhstan cited the substantial burden food costs impose on the average monthly income. The study notes that expenditures for food consume more than half the income for many Kazakhstani families, and an even larger percentage for pensioners and other low-income households.¹¹ In ICMA's survey of Kapchagai, more than three-quarters of households reported spending more than 70 percent of their monthly income for food. The impacts of using the minimum wage formula were investigated using the computer model and the Kapchagai survey data. The results are presented below.

Space Standards: The other important adjustment government officials can make to the housing allowance program is the assignment of space norms for families of various sizes. The allowance is largely determined by the cost of the family's norm space (which is in direct proportion to the amount of that space). Reducing the size of the norm space will reduce the cost of allowances to the government, but will shift the burden of paying for any "excess" amount to residents, who may or may not be able to afford it.

Experimenting With Variations of the Program: An Example

Because all of these variables can be adjusted -- singly or simultaneously -- the computer model was used to test the impact of various combinations of program parameters. These impacts were considered, both from the perspective of the government -- total program revenues and costs -- and from the perspective of individual families -- the burden on household income the program would impose. For instance, the following set of tables considers the effects of (a) 6 tenge per square meter cost to residents; (b) family contribution rates based on (100 x 3) minimum wages multiplied by the number of family members, and (c) 15 square meters of norm space per person. In a similar, but slightly different scenario,

¹¹ World Bank, Kazakhstan Economic Report, Volume II: Annexes, Report No. 12856-KZ, July, 1994.

the same factors were considered except that the requirement that families contribute 20% of their income towards housing was substituted for assumption (b).

Table 2 shows how families of various income groups would fare under these versions of the program. With the minimum wage income formula, about 61 percent of all households would qualify for a housing allowance. As expected, the average allowance was quite generous, amounting to just over 300 tenge. About half of the total amount of housing allowances would go towards families with incomes of 800 tenge per month or less. In some cases, as incomes rise, the average amount of the allowance in the income group rises as well. This result may arise because the allowance is calculated on the basis of family size. A higher income family may include several workers. It also may also be an overcrowded family relative to the space norms allotted under the program.

Using a 20 percent income contribution formula produces similar results in terms of eligibility, but dramatically different results in terms of allowances actually paid. Here, a slightly larger percentage, or about two-thirds of households are eligible for a housing allowance. But the allowance averages a considerably smaller sum of 125 tenge. Almost 70 percent of total allowances are paid to households with incomes of less than 800 tenge. Allowances are highest for the lowest income groups, and gradually diminish as incomes rise.

The overall cost of the program to the government differs under the two income formulas, as well. In the case of the minimum wage formula, the more generous housing allowances result in lower revenues for the government than under the 20 percent income formula. But, the new revenue stream still exceeds the amount currently collected by the government. Compared to the present level of 1.7 million tenge per month, the minimum wage formula produces more than 2 million tenge in revenues, an increase of more than 16 percent, with a concomitant reduction in subsidies of almost 5 percent. These magnitudes are even larger with the 20 percent of income approach. Here revenues jump by more than 78 percent above current levels to 3.1 million, and subsidies decrease by 23 percent.¹²

Some Lessons Learned from Scenarios on ICMA's Computer Model

In addition to varying the income formulas, changing space norms and per square meter costs will play out differently in terms of the overall revenues and subsidy levels of the program. While many options are available, Table 3 compares one set of options using a 5 tenge per square meter cost, income formulas of 15 percent and 100 x 4, as well as three space norms -- 15 square meters per person, 15 square meters for the first person and 10 for each additional person, and 15 plus 8 square meters for each additional person, the latter being about the smallest allocation of space that can be made given current sanitary and health norms.

¹² Until reliable estimates of program administrative costs become available, the model incorporates the assumption that additional administrative costs to run an allowance program are balanced by savings in operating and fee collection costs.

In theory, of course, options for the program formulas, and the combination of program elements is virtually unlimited. But in terms of developing realistic choices, several principles emerge from the analysis:

TABLE 2

TABLE 3

- **Neither income formula -- percentage of income or minimum wage -- is correct nor incorrect;** rather the choice between is dictated by the priorities of the government: to reduce subsidies more quickly or more slowly versus providing greater or lesser amounts of housing assistance to individual families. In general, it appears that although eligibility rates are higher under the percentage of income formula, allowances decrease with household income, and the overall subsidy cost for the program is lower. With the minimum wage formula, the combined effects of family size and income suggest the allowance is doing a better job of targeting overcrowded households, but the allowances awarded can be quite high relative to total family income.

- **Space norms can greatly affect the overall cost of the program.** If, for example, the normative percentage of income is 15 percent and the space norm is 15 square meters plus 8 for each additional person, the percentage of eligible households is just over half, or 55 percent. Increasing the space norm to 15 square meters per person raises the eligibility level to 72 percent of households, and the average allowance rises by more than a third from 77 tenge to 106. Meanwhile, the revenues and subsidies shift substantially, as well. Instead of increasing revenues by 70 percent and reducing subsidies by 20 percent from current levels under the more stringent space norm, raising the standard results in a 42 percent increase in revenues, and a 12 percent reduction in subsidies.

In contrast, changing space norms does little to alter eligibility rates under the minimum wage formula. What it does do, is increase the cost of the program dramatically. With a 15 square meter plus 8 square meters for each additional person formula, about 66 percent of households are eligible for an allowance and the average allowance amounts to about 180 tenge per month. Changing the space norm from 8 to 15 square meters for each additional person adds relatively few families to the list of eligible households, but the average allowance is almost 100 tenge higher, or 270 tenge per month.

- **Even if costs to residents are raised relatively little, and the subsidy from the government remains relatively large, this outcome represents a considerable improvement over the current system of subsidies.** The bar chart in Figure 2 shows how, for differing per square meter charges on residents, the government recovers its costs, more quickly or more slowly, depending upon the rate selected. This chart assumes families contribute 20 percent of their income and the space norm is 15 square meters per person. Note, that in every instance the overall cost for maintaining and operating the properties is the same -- 7.76 million per month. What changes is the composition of revenues and expenditures as portions of that total. In the case of charging 3 tenge per square meter, for instance, revenues comprise 1.89 million of the total cost of 7.76 million, and subsidies make up the difference between that and the total cost, or 5.87. Raising the charge to 8 tenge per square meter, on the other hand, increases revenues to 3.6 million and reduces the portion of costs consisting of subsidies to 4.17 million tenge. Note that in both instances -- whether the charge is 3 tenge or 8 tenge -- the increase in revenues and the decrease in subsidies represent an improvement over current revenue and subsidy levels.

The chart in Figure 3 presents the same information for a 15 square meter space norm per person and a (100 x 3) minimum wage formula. Here a couple of points are noteworthy. First, at payment rates of 3, 4, and even 5 tenge per square meter per month, subsidy levels would actually be higher than the current subsidy of 6.04 million because some of the income some families currently are using for housing costs would be exempt under the formula. Nevertheless, this may not be an undesirable result if the priority of the program is to target the neediest households and to provide them with the financial wherewithal to

afford the basic space norms. Moreover, as the fees charged reach 6 tenge and beyond, the revenue and subsidy levels represent improvements over the current system of subsidies and charges.

FIGURE 2

FIGURE 3

Even with this favorable financial outcome another policy issue arises: To the extent to which revenues are at all reduced, how should the government apply the savings? One option is to keep the level of services constant and reduce the subsidy. Another is to invest the revenues in means to improve services or to provide additional services. Much depends on the priorities of the government as they are spelled out in the initial phases of program design.

Phase-In Issues

In the examples used here, an important results emerges: **Full market rate pricing for providing maintenance and operations -- estimated at 11 tenge per square meter -- cannot quickly or easily be attained under a housing allowance program, if present conditions prevail. Long-term benefits of the program depend upon sustained real growth in household incomes.** Figure A-1 (found in the Appendix) illustrates this point on a sample 45 square meter apartment for a family of three persons, with an average income of 1,100 tenge. This chart assumes that the relationship between wages and inflation remains constant over the period 1995 to the year 2000. The difficulty occurs because at 11 tenge per square meter, charges will represent 45 percent of the average monthly income -- clearly an unaffordable burden for many families. If income levels and costs remain unchanged, there will always be substantial numbers of households who qualify for a housing allowance, and the difference must be made up by the government. Thus, the government must wrestle with inescapable conclusion that the real solution to revenue shortages and housing problems lies in general income growth and economic restructuring. An allowance program per se provides only a short-term mechanism for balancing the distribution of costs and benefits more equitably and efficiently.

Realistically then, a gradual course will have to be followed for raising fees as depicted in Figure A-2 (found in the Appendix). This figure shows what fees could be charged in real terms and the corresponding income burdens these fees would place on a typical Kapchagai family. At a minimum, the system of housing allowances should be flexible enough -- that is, fees should be raised more quickly or more slowly -- to reflect the rise or fall of incomes relative to inflation each year of the program. Several observers, including Ministry of Housing officials noted that real income growth is projected to drop over the next two years (they declined to say by how much) before rising in the following years as a result of the benefits of privatization and other reforms in various economic sectors. A housing allowance program design that does not incorporate realistic expectations about real income growth is bound to be short-lived.

Two key factors will determine how quickly the government can move to the full 11 tenge per square meter per month cost (or beyond it to cover capital expenditures). The first factor is the political acceptability of the rate of increase. Political acceptability can be enhanced by tying fee hikes to immediate and visible improvements in the quantity and quality of utility and maintenance provided. A politically persuasive means of "selling" the housing allowance program is for local housing officials to state unequivocally that "X" amount of increase in fees will be associated with "Y" amount of new or improved services -- and then make good on the promise.

The second factor accounting for how quickly rates can adjust to full cost is the absolute limits on households' ability to pay these costs. Such limits are undoubtedly linked to the point just mentioned -- the general health of the economy and the effect the process of economic restructuring has on the growth of real

incomes. Given that households are now typically spending more than half of their reported income on food, they will be unwilling or unable to pay higher housing costs without sacrificing other necessities.

3.2 Excess Space Model

One of the key features of local housing markets in Kazakhstan is that relatively few urban households lack basic facilities (running water, kitchens, baths, electricity, etc). However, more than a few families are over-crowded, and estimates of this number vary depending upon which norms are used to define over-crowding. If a minimum standard of 15 square meters total space for the first household plus 8 square meters for each additional person is used, in accordance with minimum health codes, then survey results in Kapchagai indicate that about 12 percent of households are overcrowded. A more lenient standard of 15 square meters per person would raise the proportion of the population overcrowded to 44 percent. At the other extreme, approximately 35 percent of the population may be considered to occupy housing units with substantially more than the normal amount of space (using a factor of 1.5 times the 15 plus 8 square meters per person norm). This leaves between 42 and 52 percent of all families occupying space that is regarded by public policy to be appropriate to their needs.

The central concept behind the excess space model is that space represents wealth for those who occupy it as well as costs for those who maintain it. Decisions about how much space to occupy should, therefore, reflect those costs. Since the amount of space occupied by a family is a measurable asset, households occupying excess space should pay more per square meter for maintenance and utilities than those who are overcrowded or occupying a normal amount of space. These additional revenues -- over and above what would be collected under the regular maintenance fees -- can be used to provide allowances to other families unable to afford increases in their housing costs.

Excess Space Formula

The fees for maintenance and utilities charged to families would differ for normal space and for excess space, with a "premium" charged for space occupied by families that is considered to be in excess of the norm. In contrast to the income model, the basic formula for the excess space model is considerably simpler. It provides a housing "allowance" in the form of a discounted fee for maintenance and utilities, and does not require a complicated mechanism for determining income and distributing allowances to eligible families. To the degree that the increased rate for excess space is fairly high, then families occupying this excess space may be encouraged to move and to sell or rent their unit to other families that do need it. Another advantage of the excess space model is that the basic data on which it relies for implementation already is available to each municipality -- that is, the total space of each flat and the household size of the families at each address are already part of the central records of the municipality. Unlike the income model, uncertainty about the allowance computation is reduced because total square meters and the number of family members is known.

As is often the case, something is sacrificed with simplification. In particular, the excess space formula does not fully address the issue of inequity, except in so far as those occupying excess space are affluent. In fact, the survey results show that no clear-cut relationship exists between income and space, a not unexpected result considering the price mechanism has not been used in the past to allocate space.

Choosing the Elements of the Excess Space Model

As with the income model, several elements of the excess space formula are policy decisions that need to be considered by local and republic officials. Also, many of the same caveats about setting unrealistic goals apply.

Charge to Residents Per Square Meter of Norm Space: In the case of the excess space models, two sets of fees are required; one for the norm space consumed by residents and the other for excess space. For the norm space, the charge will be determined by how quickly the government desires to transfer the full 11 tenge per square meter cost to residents balanced against the need to make the charges for normal space affordable for most families. The extent to which the cost of normal space is "discounted" below cost is, in fact, the form in which housing "allowances" are distributed under this version of the program. Using the current fee as guide (though this fee is for all space, not just norm space), residents are paying on average about 2.45 tenge per square meter. Immediately raising the cost of norm space to 11 tenge is unrealistic; even 5 tenge represents a doubling of current prices. But this leaves considerable range in which to set the charge.

Charge to Residents Per Square Meter of Excess Space: The charge for excess space -- the square meter fee charged to families for space they are occupying that is in excess of the norm to which they are entitled -- will likely be set as some multiple of the base fee. This could be a flat fee, or as has been proposed by the Ministry, a series of "coefficients" or multipliers for different increments of excess space. Under the Ministry's proposal, the fee would be 1.1 multiplied by the base fee for every meter of the first ten extra meters of space, 1.2 of the base for every meter of the second ten meters of extra space, and so on, up to a maximum charge of 1.5 times the base.

As an example, if a family of two is entitled to 30 square meters of space under a 15 square meter per person norm, but occupies 45 meters of space, then at the base rate of 7 tenge per square meter, the charges will be as follows: the 30 meters of norm space are charged at the base rate of 7 tenge x 30 or 210 tenge; the next 10 meters are charged at $7 \times 1.1 \times 10 \text{ m}^2$, or 77 tenge, and the remaining meters are charged at $7 \times 1.2 \times 5 \text{ m}^2$, or 42 tenge. The total charge for both norm and excess space is, therefore, 329 tenge.

Obviously, the amount charged is important, but several other issues need to be considered by policymakers as well:

- Should the charge for excess be based on the charge for norm space, or should it be decoupled and charged as a visibly separate fee?
- Should the charge for excess space be a flat fee or a fee calculated using coefficients (multiples of the norm fee)?
- If coefficients are used to charge for extra space, over what intervals do they change? Every 10 meters? Every 5 meters? Every meter of per capita space? Is there a reasonable empirical basis for determining the appropriate interval?

Space Standards: A critical element of the excess space model is defining what is, in fact, "excess." The allowances are awarded in the form of discounts on norm space only, and additional revenue is

generated on the basis of how much excess space there is in the housing market to be charged. For example, Figure A-3 and Table A-1 in the Appendix show how much excess space exists for various family sizes in the city of Kapchagai assuming a norm of 15 meters plus 10 meters for each additional household member. Reducing the size of the norm space will reduce overall program costs for allowances, but will shift the burden of paying for any "excess" amount to residents, who may or may not be able to afford it. Increasing the space norm will result in a greater portion of discounted norm space for residents, but will reduce the amount of excess space available for premium charges, thereby increasing the overall cost to the government.

Experimenting With Variations for the Program: An Example

ICMA's housing allowance computer model was used to evaluate various combinations of the program parameters listed above. The impacts of these versions of the program were assessed from both the perspective of the government -- total program revenues and costs--and from the perspective of individual families -- the burden on household income the program would impose. Table 4 and Table A-2 (in the Appendix) consider the effects of a (a) charge for norm space of 4 tenge per square meter, (b) charge for each meter of excess space using the Ministry's proposed set of coefficients to be applied in ten meter increments (as illustrated above), and (c) 15 meter per person space norm.

An analysis was carried out of how families of various income levels would fare under this proposal. It is clear that a 15 square meter per person space norm, given the prevailing distribution of family sizes in Kapchagai, leaves relatively little "excess space" in the system on which to impose excess charges. Moreover, families with excess space appear to be distributed fairly evenly throughout the income distribution (though the actually amount of excess may vary with income).

The allowance is given in the form of greatly reduced charges for norm space. But, even at 4 tenge per square meter -- a substantial discount of 64 percent over the 11 tenge per square meter real cost -- the price of that norm space imposes a heavy financial burden on Kapchagai's lowest income families. Those households earning between 200 and 400 tenge per month would pay more than half of their income for norm space, as opposed to the one-third they pay now.¹³ Families in the next income group (earning between 400 and 600 tenge) pay about 30 percent of their income for norm space. Note however, that more than half of these families also consume excess space. Adding the charge for excess space to their total fee results in a relatively large portion of income spent on housing. Many of these families would, therefore, have a great financial incentive to sell, rent, or otherwise move from their units.

From the government's perspective, the revenue and subsidy figures look favorable. As shown in Table 4, the 2.4 million tenge collected monthly in fees for normal space added together with the 551,000 tenge from fees for excess space represent a 68 percent increase in fees currently collected by the city of Kapchagai. Overall subsidies are reduced from current levels by almost 20 percent.

¹³ The lowest income group -- those earning below 200 tenge per month -- pay more than 100 percent of their income under virtually any scenario. These families likely require special assistance under existing social welfare programs.

Some Lessons Learned from Scenarios on ICMA's Computer Model

As with the income formula, the excess space model can be adjusted, altered, and applied in any number of ways, employing various space, norm fee and excess fee combinations. For comparison's sake, several scenarios were run using parameters and coefficients suggested by the Ministry of Housing. These options were run on the model using a 5 tenge base cost, and all three space norms currently under consideration: 15 square meters per person, 15 plus 10 square meters for each additional person, and 15 plus 8 square meters for each additional person. Table 5 presents these results.

TABLE 4

TABLE 5

- **The fact that there are substantial numbers of households with excess space, does not imply that all of these households have a large amount of this space on which to impose excess charges.** Somewhat surprisingly, under the scenarios tested, changing the space norm does not have a dramatic effect on overall revenues and expenditures. One of the main reasons may be the distribution of excess space: while most families have some, the vast majority of families do not have a lot of it. Indeed, with average excess space of only about 14.8 with a 15 per square meter per person norm, a relatively limited number of families would incur substantial charges for excess space in absolute numbers (though the charges may well represent a substantial part of those families' income).

- **Little, if any, added revenue is gained by imposing a complex set of excess charges.** Indeed, another reason why space norms don't affect overall revenues very much in this case may well lie in the manner in which excess charges are computed. The coefficients are applied to every meter of excess space in ten meter increments. For a typical family of three in Kapchagai, using a space norm of 15 square meters per person, and changing the coefficient applied to the base fee of 4 tenge in ten square meter increments, fees will not even begin to approach full costs, even for a 150 square meter unit. One suggestion that has been raised is to reduce the increments on which fees are raised to 5 square meter intervals. Another proposal is to change the coefficients on the basis of excess space per capita. For example, in the sample family, a higher fee would apply for every 3 square meters of space (because it is a three-person family). Figure A-4 (in the Appendix) demonstrates the impact of this last approach using a 4 tenge fee for the norm for the same family. Local officials should consider using the ICMA model to test various increments of space that are suitable given the construction and configuration of the local housing stock. Alternatively, the model can be used to compare the effects of flat fee charges for each square meter of excess space. That is, **one option to consider is to simplify the excess charges by applying a flat rate. The rate can be set at a level considerably closer to the real cost of that space than is the charge for the norm.**

- **Even if costs to residents are raised relatively little, and the subsidy from the government remains relatively large, this outcome represents a considerable improvement over the current system of subsidies.** The bar chart in Figure 4 considers how various base charges for norm space -- and the excess charges applied to that base on a 15 square meter per person norm using the proposed coefficients, affects the subsidies and revenues that are generated under the program. The chart shows that, charging for excess space at any base cost of 3 tenge to 11 tenge results in an improvement over the current subsidy level. Indeed, at 6 tenge per square meter and above, revenues outpace subsidies for the program as a whole. If 11 tenge were used as the base, the program would actually generate a surplus because the charge for excess space would be higher than the full actual cost to the city.

Phase-In Issues

For this reason alone -- the ability of the government to recover costs fairly quickly -- the excess space model may be appealing. But it contains a serious flaw in that it does not take account of a family's ability to pay for norm, much less excess, space. Even a phase in of charges will not necessarily overcome this problem. This problem can be illustrated by considering the example of a three person family with 45 meters of normal space and 22 meters of excess space. It is assumed the family has the average Kapchagai income of 1,100 tenge per month. Even if fees started at or below where they are now and were gradually increased to the full percentage of cost by the year 2000, the fees would exceed acceptable world-wide

standards for housing costs by the time the fee reached 6 tenge in 1998. By then the family would be paying almost 40 percent of its income. Of course, that may be a desirable outcome of the

FIGURE 4

program in that the family has a strong financial incentive to move. But, if the family in the example adjusted their housing situation by moving to a different unit of the norm size, the cost of that norm space would be 737 tenge or almost two-thirds of their income.

The difficulty -- which is similar to that of the income model -- is that, **even if wages do keep pace with inflation, most families will not be able to bear the 11 tenge full cost of maintaining and providing services to their properties. What is needed to ensure the long-term success of the housing allowance program is sustained growth in real income and a general improvement in economic conditions.** The real solution to revenue shortages and housing problems lies in general income growth and economic restructuring. An allowance program per se provides only a short-term mechanism for balancing the distribution of costs and benefits more equitably and efficiently. Moreover, the points made earlier in the discussion of the political difficulties and real limits on the ability of households to shoulder a greater portion of housing costs are no less valid in the case of the excess space model. In fact, they may be exacerbated because this model, by design, excludes income as a criterion for receiving an allowance.

4.0 A Hybrid Model Combining Aspects of the Income and Space Models

Clearly, both the income model and the space model offer advantages and disadvantages as a way to implement a housing allowance program in Kazakhstan. The obvious advantage of the income model is that it -- by definition -- targets assistance to neediest households based on their income. Because of its emphasis on income and need, this model is likely to be perceived as a fair and equitable method of distributing scarce housing resources. On the other hand, the difficulty with the income model is its relative complexity. The formulas may seem unclear and arbitrary to people affected by the new system. Moreover, administratively the income model is fairly demanding. It requires extensive calculations on a household by household basis, as well as rules and requirements for documenting and verifying households' income. The administrative burden can be lessened somewhat by requiring "self-certification" on the part of households; that is, if a household wants to receive a housing allowance, it must apply and furnish documentation that they are eligible for the program, but administrators would not attempt to verify other sources and amounts of income.

The excess space model comes with its own set of advantages and difficulties. The major advantage is its relative administrative ease compared to the income model. The "allowances" are granted in the form of below-cost rates for norm space. These rates as well as the fees charged for excess space are set across the board, which means the program does not require extensive calculations on a case-by-case basis. On the other hand, because allowances are largely determined by the amount of space that is consumed, they are less truly targeted to households on the basis of need. For example, some smaller households (especially widows and retired couples) that occupy larger units because their families have moved away may not have the means to pay higher maintenance and utility costs. Similarly, some families who are considered "under housed" in terms of space may actually have sufficient incomes to pay higher housing costs without the allowance. One way to address this issue is to exempt certain categories of households from higher fees (eg., veterans and the disabled, as is now done) and to designate other categories as those that should pay more (eg., households with second properties or other types of assets, or households of "high" income).

Still, for these reasons and all the apparent difficulties, Ministry and local officials may want to consider combining the targeting of the income approach with the administrative simplicity of the excess space model. While one possibility is offered for consideration here, any number of possibilities exist for how this might be achieved.¹⁴ The point is that ICMA's model can be used to try out any of the combinations that appear reasonable to policymakers.

The Excess Space Model with an Income Cap

As an illustration of how a hybrid model might work, the same space model parameters were run on the model as those outlined earlier in this report. The assumptions include (a) a cost to residents of 4 tenge per square meter, (b) applying the set of coefficients proposed by the Ministry to every 10 meters of excess space, and (c) a 15 square meter per person space norm. This time, instead of charging all households the cost of all the norm space they occupy at 4 tenge per square meter, the charge for norm space is governed by a 15 percent cap. That is, a family pays 15 percent of its income, or the total amount due for norm space -- whichever is less. Results are shown in Table 6 and in Table A-3 in the Appendix.

The average payment for normal space under these assumptions is 120 tenge per household as opposed to 167 per household if families are responsible for the cost of all the norm space at 4 tenge. This represents a higher "allowance" than under the previous version of the model because, for some families, the cost of norm space is further reduced.

An analysis of incomes of families receiving allowances under the two approaches reveals that families throughout the income distribution are helped by the income cap (because large total incomes in large families could result in these families qualifying for assistance). But, families in the lower part of the income spectrum, particularly those with total incomes of less than 800 tenge per month, are helped considerably. For example, the percentage of income paid on average for normal space by families in the 200 to 400 tenge range is capped at 15 percent while previously such families were supposed to pay 52% of their income.

As far as overall program costs are concerned, the space-model-with-income-cap obviously costs more to the government because it reduces fees for norm space required from residents. In this example, the new version of the model results in 2.2 million tenge in revenues as opposed to 2.9 million that would be collected under the previous excess space model. Subsidies would still decrease, but not as much (by 8 percent instead of almost 20 percent). Some of these costs could be balanced, however, by imposing substantially higher charges on the excess space that is consumed.

¹⁴ Other options include using the traditional income model for norm space and charging a premium for excess space. Or, as an alternative to the space model, households could be separated into low, normal, and high space consuming groups. Separate rates would be charged the three groups taking into account households' ability to afford norm space. Families in the first groups would be charged a reduced rate for the space they are occupying; families in the second and third group would be charged a normal rate for standard space and a maximum rate for all space occupied above the space standard. Ministry officials have, thus far, expressed greatest interest in the option presented in the text as the space-with-income-cap model.

The bar charts in Figure 5 can be compared to those in Figure 4, to show the impact of capping households' contribution towards norm space at various base charges ranging from 3 tenge to the full cost of 11 tenge per meter. The charts use the same space norms and coefficients to generate estimates of

TABLE 6

FIGURE 5

revenues and subsidies. Clearly, the excess space model with cap affords more protection to those families who are unable to afford the norm space to which they are entitled. But, this protection comes at a price. Reductions in subsidies are real and occur at all price levels above 3 tenge per square meter. But, they are not nearly as substantial or dramatic as the savings that can be achieved with the pure excess space model. On the other hand, these savings are only achievable insofar as households are able to pay fees out of their current incomes. Here, then, is a vivid illustration of one of the fundamental choices facing the government as it implements a housing allowance program: how best to balance the need to reduce housing subsidies against protecting low income families unable to afford increases in the cost of housing.

It is important to point out that not all the administrative difficulties of the income model will be resolved under the space-with-income-cap model because, if income is involved in the determination of who receives an allowance, some type of documentation and review process must be set up. But, the system could be considerably less cumbersome than under the traditional income model. For one thing, the model could incorporate the suggestion for self-certification of income noted above. Residents who feel they cannot afford the new fees for the norm space to which they are entitled can apply for a housing allowance and verify that the required amount is beyond their means. Applicants for case-by-case certification are expected to be relatively few in number, because under most scenarios run, the number of households unable to afford the basic norm space is on the order of 15 percent. Lowering the space norms would further reduce the number, if people adjusted their housing. For another thing, if not performed for every household, the overall cost of income certification is considerably less.

Meanwhile, those who do not wish to apply for an allowance but are in need still receive the allowance in the form of fees-below-cost for norm space. Of course, families who may be able to pay the true cost for norm space do not do so under this model, as they also receive a housing allowance in the form of reduced charges for norm space. In this sense, the space-with-income-cap model is less targeted than the traditional income model. But the benefits of being able to quickly implement a relatively simple system of allowances may outweigh the cost of these people receiving an allowance. This is especially the case since this system -- as with both the income and excess space models -- represents a marked improvement over the current system of subsidies. At the very least, this system should be considered by policymakers as a "stepping stone" to the more traditional housing allowance program.

5.0 Administrative Issues and Costs

All the estimates made thus far in the examples provided in this paper show revenues and expenditures for the program without considering administrative costs. Certainly, further work needs to be done to develop and refine estimates for administrative costs because these costs result in a direct reduction in the amount of money actually available for housing allowances. A checklist is provided in Exhibit 3 to help local officials begin to define particular administrative tasks and how much they will cost.

When reviewing this list, several points bear consideration:

- **Whether the program implemented is the income model, the excess space model, or the space-with-income-cap approach, housing allowances can be treated as a reduction in fees rather than as a cash or voucher distribution.** Such an arrangement is likely to be more cost efficient and can reduce the potential for abuse of the system. If an allowance is provided to a family in the form of cash or as a

voucher with a certain value, the family would use that allowance to pay some part of the monthly fees to the city. With cash, there is a chance the money will be used for purchases other than housing; with vouchers there is some risk of counterfeiting or re-sale. Much of this risk can be avoided if the allowance is provided as a reduction in fees that otherwise would be owed for housing. The other advantage is that, where incomes are rising more slowly than prices, monthly adjustments in cash or voucher type allowances become quite cumbersome because of the multiple calculations and transactions involved. As reductions in fees, allowances will require fewer transactions and less documentation. Consequently, the program will cost less to administer.

- **To simplify the program, and to enable housing allowances to be implemented fairly quickly, serious consideration ought to be given to allowing self-certification of income on the part of those who apply for allowances.** This would not skirt difficult issues about what assets or financial sources are to be counted as income, nor does it address potential abuse of the program, but it does permit the launching of a new program without creating an extensive bureaucracy. At the very least, self-certification can be viewed as a "stepping stone" to a more sophisticated system of income verification, once the new system of income tax reporting is in place.¹⁵

- **On the difficult question of which household assets are to be counted as income, it may be possible to establish "elimination" criteria to reduce eligibility rates for the program.** For example, ownership of a dacha could disqualify families from receiving a housing allowance. The logic of this requirement is to suggest that if families already have the resources to own one home, scarce subsidies should not be provided in order for them to obtain another home. Recent expensive acquisitions (such as a new car) could also be used to screen for eligibility.

- **When administering space norms for the program, officials should take into account the physical size and structure of housing units in the locality.** In some areas, one room apartments may be the smallest sized unit available. Either space norms should be set at levels corresponding to the space in these units or these units should be exempt from certain "excess charges" on the grounds that it is not possible for the persons or the families living in them to avoid these costs by moving to smaller space.

- Some residential utility rates -- gas, cold water, sewer, and electricity -- are cross subsidized by charging higher rates for enterprises and other commercial users. Because the financial prospects for some of these enterprises are somewhat uncertain, bankruptcies, defaults, and non-payment of utility bills on the part of enterprises may cause **upward pressure on residential utility rates in the future. Housing allowance program administrators should monitor this situation closely**, as allowances and rates of increases on fees may have to be adjusted so as not to over-burden residents.

¹⁵ As of this writing, the Ministry of Finance was preparing to implement a 60 percent tax on gross income, along with new forms and reporting procedures.

EXHIBIT 3

EXHIBIT 3 - Con't

EXHIBIT 3 - Con't

EXHIBIT 3 - Con't

6.0 Conclusions

Based on the experience of housing allowance programs already underway in transitional economies, and drawing on the various scenarios tested for the program in Kapchagai and Talgar on ICMA's housing allowance model, several program design and implementation issues will be important to the Republic of Kazakhstan as it develops a national system of housing allowances. These include:

- **No single housing allowance formula works best;** rather, policymakers will have to develop a program adapted to local circumstances. A balance must be struck between eliminating government subsidies quickly and providing as much help as necessary to those in need. Program requirements should consider local conditions regarding the characteristics of the housing stock (ownership, size, physical condition, etc.); local costs of building management, maintenance and utilities (communal housing services); the demographic and income characteristics of the target population; and the composition and size of current housing subsidies that need to be reduced. ICMA's housing allowances model can help narrow the range of suitable program options.
- **Policy choices made by the government with respect to program design (eligibility, contribution rates, allowance formulas, size and rate of cost increases, etc.) must be sensitive to their overall effects on the population.** Inappropriate spacial norms or too rapid increases in fees could be counter-productive and undermine the intended benefits of the program through low rates of participation, resistance to implementation, and higher program costs in the long run.
- In order for a program of fee increases with housing allowances to work, **it is essential that government improve the quality, quantity and reliability of maintenance and utility services provided.** Otherwise, resistance to rent increases is likely to be severe if services are not improved simultaneously. Privatization of maintenance is a key element in any formula for rapid and visible improvement in services.
- **Projections of net revenue increases designed to reduce housing subsidies must take into account the additional administrative costs of the program,** not just the cost of the housing allowance per se. This is particularly important with respect to the cost and complexity of income certification, verification of ownership or program eligibility, staff training, and the use of various measures to prevent abuse of the program. An appropriate next step, is to begin to define the organizational structure and administrative costs of the program with input from local officials. A checklist for this purpose has been provided in this report.
- Both the **fee increases and the housing allowances must be phased in over an extended period of time** (for example, two years) in order for families to both be able to adjust their budgets to higher costs -- already high because of inflation -- or to move to other units.

• **On the one hand, it is important to recognize that substantial elimination of subsidies from the housing sector will not occur in the foreseeable future; on the other hand, an almost immediate improvement over the current system of subsidies can be gained by implementing a well designed housing allowance program.** Sharp reductions in subsidy levels require a boost real incomes and a general improvement in the country's economic prosperity, neither of which is within the power of housing officials to control. However, the other factor that can help move the housing sector a long way towards self-sufficiency is a real reduction in the cost of maintenance and operation of housing units. Certainly, the introduction of meters for certain utilities (as is done now with electricity) would represent a great stride in the direction of cost control. Encouraging the formation of condominium associations and the privatization of maintenance services would further this goal, as well.

For these and other reasons described throughout this report, the allowance experiments in Talgar and Kapchagai should be thoroughly reviewed and evaluated by policymakers. Comments should be sought from all participants -- local officials, Ministry representatives, and particularly households who both were or were not granted allowances -- **before full-scale implementation** throughout the Republic.

APPENDIX I

ICMA's Housing Allowance Computer Model¹⁶

All the charts, tables, and figures presented in this report are examples using a variety of assumptions about space, fees, and portions of income to be contributed by families towards their housing. Similar tables and figures can be produced in virtually any combination according to the specifications of local and republic officials. Using this information, officials can choose among realistic targets for eligibility rates and for revenue increases and subsidy reductions. Options can be developed for the various combinations of space norms, income limits, and fees for residents that can produce the desired program results.

The model incorporates data from surveys of Kapchagai and Talgar residents that were carried out in June, 1994. More than 350 households are represented in the Kapchagai survey and more than 550 households are represented in the survey of Talgar. The surveys collected information on household demographics, income, housing expenses, and attitudes towards building conditions and maintenance.

Policymakers can use the model to test several versions of a housing allowance program on the Kapchagai and Talgar data. These versions include:

- (1-A) Income Model - with percentage of income contributed by families towards housing;
- (1-B) Income model - with a minimum wage formula to determine how much income families have left over for housing after basic expenses;
- (2) Excess space model - charging families different rates for the normal space and excess space they consume;
- (3) Space with income cap model - incorporating into the excess space model a percentage of income maximum that families pay for their normal space, while charging a higher rate for excess space.

Either through dialog boxes or directly on the spreadsheet, users specify the main program parameters including space norms, portion of family income to be contributed towards housing, charge for norm space, additional charges for excess charges and how those charges are to be computed. The model then produces -- **in both Russian and English versions** -- reports on how much space is consumed by family size, how many households qualify for allowances, how many households of various income levels receive allowances, what the overall costs are for the program in terms of revenues and subsidies and how this compares to the current system of subsidies.

What the model does not answer, of course, are questions about the political feasibility of a design for a housing allowance program, as no substitute exists for human judgement on that score. With the

¹⁶ The model was developed by staff and consultants of ICMA and Abt Associates. Special thanks are due Ilya Lipkovich and Alexander Rodionov for their efforts in this project. Also, the assistance of Jeffrey P. Telgarsky of the Urban Institute, who shared the experience of the Institute's housing allowance model in Szolnok, Hungary is gratefully acknowledged.

ICMA model, the choices confronting policymakers may be no less difficult, but the economic consequences may be more readily apparent.

APPENDIX II

Additional Tables and Charts Referenced in Text

FIGURE A-1

FIGURE A-2

TABLE A-1

FIGURE A-3

TABLE A-2

FIGURE A-4

TABLE A-3